Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

In the Matter of)	
Connect America Fund)	WC Docket No. 10-90
A National Broadband Plan for our Future)	GN Docket No. 09-51
High-Cost Universal Service Support)	WC Docket No. 05-337

COMMENTS

of

FRED WILLIAMSON & ASSOCIATES, INC (FWA)

I. COMMENT SUMMARY

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2	As requested by the Commission in the Notice of Proposed Rulemaking (NPRM), 1 FWA
3	has provided the attached data and analysis to show the effect not only of the NPRM
4	proposals, but also the effect of the National Broadband Plan (NBP) proposals to
5	redistribute existing rural Rate of Return Incumbent Local Exchange Carrier (RoR ILEC)
6	support to non-rural ILEC areas and to effectively eliminate interstate and intrastate
7	switched access revenues. These proposals cannot be considered in isolation from each
8	other because they all impact the ability of rural RoR ILECs to fulfill the Act's Section
9	254 universal service objectives.
10	If the Commission were to adopt the proposals contained in the NPRM and NBP for
11	Universal Service Fund (USF) and Intercarrier Compensation (ICC) reform, as they
12	affect the rural RoR ILECs, the attached analysis shows a deterioration of revenues over
13	time that ultimately results in a loss of 40% to 65% of the rural RoR ILEC's revenues.
14	The loss of these revenues will make it impossible for these rural ILECs to:
15	• Pay for expenses and salaries, as well as principal and interest payments on loans
16	made for network investments.

 Continue the investments necessary to upgrade their network so that all their consumers have access to high quality basic and broadband service access at affordable rate levels.

¹ Notice of Inquiry and Notice of Proposed Rulemaking in WC Docket No. 10-90, GN Docket No. 09-51 and WC Docket No. 05-337, Released April 21, 2010, paragraph 53:

[&]quot;To the extent that any commenter believes that these proposals, or the proposal to cap legacy high-cost support, would negatively affect affordable voice service for customers today, we would encourage such a commenter to identify all assumptions and to provide data, including information on network investment plans over the next five years and free cash flows, to support that position."

1	• Continue to maintain the network so that quality service is provided and a Carrier
2	of Last Resort (COLR) is available.
3	Quite likely, loss of these revenues will ultimately result in many rural RoR ILECs
4	going at a minimum through bankruptcy and possibly out of business. Whichever is
5	the case, the effect on the rural communities they serve will be devastating:
6	• There will be significant harm to rural economic development – businesses and
7	residential customers would no longer have access to high quality voice and
8	broadband service at affordable rate levels that are comparable to those offered
9	in urban areas.
10	• Hospitals, clinics and schools would be disadvantaged - inability to obtain
11	reliable high speed broadband service.
12	• Jobs at rural RoR carriers will be lost. Indirectly, jobs for suppliers and

- Jobs at rural RoR carriers will be lost. Indirectly, jobs for suppliers and businesses that provide services to the rural RoR ILEC will be lost. This will have a secondary impact on businesses operating in rural communities. The salaries from individuals that lose jobs will no longer be available to purchase goods and services in rural community businesses.
- Loss of rural community tax base and revenues paid to other rural utilities (gas, electric and water), further harming the ability of the rural community to remain viable.
- Beyond harming the rural community and consumers, the proposals if adopted, will result in loan defaults, and loss of equity by rural RoR ILEC owners.

II. BACKGROUND REGARDING RURAL ROR ILEC OPERATIONS

- 2 FWA provides consulting services for small rural RoR ILECs in a number of States. Each
- 3 of these rural RoR ILECs:

- Operates in rural areas with low customer densities and high service cost.
 Communities within these service areas generally do not have services found in
- 6 more urban areas often they do not have hospitals, grocery stores, shopping
- 7 centers, libraries, etc.
 - Is an Eligible Telecommunications Carrier (ETC) and the COLR for the customers in the service area. Wireless service may be available in portions of the area served by these ILECs, but it generally provides poor coverage and quality, and low data speeds. Cable service is often not available, and if it is, serves only community centers and does not serve as a COLR, but only offers service when and where it chooses. As a consequence, business and residential customers in the ILECs' service areas rely heavily on the rural RoR ILECs' telecommunications services not only for communications, but for health, safety,

educational and high speed data needs.

- Operates under Rate of Return (RoR) regulation in both the Federal and State jurisdictions and is subject to State Commission audits of its earnings. As a RoR carrier, all of the rural ILECs' regulated rates charged to retail and wholesale customers are tariffed and approved by either the Federal or State regulators.
- Has invested or will invest in significant network upgrades to provide state of the
 art facilities capable of providing both basic (voice) and advanced (broadband)
 services to its customers.

1	• Provides basic and advanced services at affordable rate levels, comparable to the
2	rate levels for these services in urban areas.
3	In these comments, FWA will address (a) the proposal to shift rural RoR ILECs from rate
4	of return to incentive regulation and to freeze interstate common line support (ICLS) ² and
5	(b) provide specific financial analysis, as requested by the Commission, ³ to show the
6	adverse effect of the National Broadband Plan (NBP) proposals on rural RoR ILECs.
7	The proposals will have financial consequences that will deter or possibly prohibit rural
8	LECs from providing affordable voice and broadband services in their areas. This would
9	have devastating economic consequences on rural America.
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11	FWA, and the rural RoR ILECs it provides services for, support the NBP's goal of
12	providing high speed broadband access to all Americans. Rural RoR ILECs have been,
13	and are making every effort to deploy networks capable of providing both voice and high
14	speed broadband access to all of the customers in their service areas. Without the
15	recognition of the need to recover high costs of serving rural and remote areas, any
16	broadband plan will fail in rural service areas.
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18	III. RURAL ROR ILECS ARE SUCCESSFULLY PROVIDING QUALITY

ACCESS TO BASIC AND HIGH SPEED BROADBAND SERVICES. REFORM

SHOULD NOT JEOPARDIZE THIS SUCCESS

- During the debate regarding the future of universal service funding and intercarrier
- compensation, the Commission should not overlook the fact that rural RoR ILECs in the 22

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² Id., paragraphs 55 and 56.

³ Id, paragraph 53.

1 United States are a success story in the provision of quality basic and advanced services 2 at just, reasonable and affordable rate levels, as required by Section 254 of the 3 Communications Act. Rural RoR ILECs have utilized revenues received (a) from their 4 retail customers, (b) from wholesale customers that utilize the rural RoR ILEC networks 5 to provide their services (intercarrier compensation), and (c) from the universal service 6 funds to provide networks that bring not only quality voice services to customers, but 7 higher and higher broadband service speed to all of the rural customers served by the rural RoR ILEC. These networks extend to the most remote customers including farms 8 9 and small businesses where typically reliable competitive options are not available. 10 Rural RoR ILECs over time have consistently improved their networks and today are striving to deploy more fiber and state-of-the-art electronics in their networks.⁴ 11 12 This success in the provision of basic and broadband services to customers of rural ILECs 13 has been made possible by a number of factors: 14 Stable and predictable revenue that is used to maintain the existing network and 15 services provided to customers and fund network upgrades. As RoR carriers, rural ILECs 16 are able to recover via retail rates, intercarrier compensation and the universal service 17 fund, their actual costs of providing service at a return level specified by the Federal and This actual cost recovery (that is subject to Federal and State 18 State regulators. 19 Commission audits) insures that revenues are available to deploy and maintain networks 20 that provide quality basic and broadband services at affordable rate levels to all

⁴ Rural RoR ILECs have been efficiently and prudently upgrading their trunk and distribution networks by replacing copper with fiber for a number of years. The speed of the upgrades depends on the amount of debt financing the rural RoR ILEC is able to obtain and it ability to repay that debt. Many of the rural RoR ILECs have or are planning to replace their circuit based switches with soft switches so that their networks are entirely IP based. The objective of these upgrades was and is to provide a more reliable, higher quality network to serve customers. The same network that provides universal services can also provide high speed broadband access for all of the customers in the rural RoR ILEC service area.

- 1 customers in high cost to serve rural RoR ILEC service areas. Rural RoR ILECs rely
- 2 heavily on stable and predictable revenues from intercarrier compensation and universal
- 3 service funds to maintain and provide basic and advanced service in their service areas.⁵
- 4 **B.** Access to low cost funding from the Rural Utilities Service (RUS) or similar lending
- 5 agencies. Deploying state of the art fiber based networks in rural high cost to serve areas
- 6 would not be possible for most rural ILECs without long term loans from RUS or similar
- 7 lending institutions. The lending institutions make these loans based on the expectation
- 8 that the cost based recovery discussed above will be available to insure repayment of the
- 9 loans by the rural ILEC.
- 10 If, at this juncture, the Commission were to decide to significantly revise the method that
- is used to recover the rural RoR ILECs' costs to provide service and reduce the revenues
- available to rural RoR ILECs as proposed in the NPRM and NBP, (a) by eliminating RoR

⁵ Policy decisions for decades in the telecommunications industry created a rate design that allowed the maintenance of affordably priced local rates in rural areas by relying on toll services to recover the remaining high costs to provide service in low customer density rural areas. When competition was introduced into the toll market, the rate design was changed to replace toll service revenue with access revenue. The policy was however still the same – affordably priced local rates were maintained by relying on state and interstate access revenue to recover the remaining high cost to provide service. Subsequent to the adoption of the Universal Service provisions of the Act in 1996, the Commission, and some State Commissions began to adopt a new cost recovery rate design that lowered access rates (and thus lowered toll rates) and moved the access revenues into universal service funds. The cost recovery moved into the universal service funds are primarily loop distribution costs (the High Cost Loop Fund and Interstate Common Line Service Fund- costs previously recovered in the Carrier Common Line access charge) and local switching costs (Local Switching Service fund - costs previously recovered in the local switching access charge). Universal service funding is often incorrectly characterized as a government subsidy for rural RoR ILECS. It is not. It is, as briefly discussed above, revenue that previously was recovered in toll and access rates that recovers the annual operating cost to provide loop distribution and switching plant. Without these facilities, customers would have no service (basic or broadband). Rural RoR ILECs use the USF revenues to recover their costs and if applicable, to repay the loans that they took out to deploy these loop and local switching facilities and to maintain these facilities. If this portion of the rural RoR ILEC rate design were lost or significantly reduced, the choices faced by rural RoR ILECs would be to either raise local rates to unaffordable levels or to possibly default on loan payments and likely cease providing service. Either of these options is at odds with the Universal Service provisions of the 1996 Act.

- 1 regulation and further capping universal service funding by freezing ICLS, 6 and (b) by
- 2 revising the funding method to be based, not on actual costs to provide service, but on a
- 3 theoretical cost of service⁷ and (c) by eliminating all current USF funding for rural RoR
- 4 ILECs and redistributing this funding through the CAF to build broadband networks in
- 5 non-rural ILEC areas and (d) by nearly eliminating the revenues generated through
- 6 intercarrier compensation, etc., the likely result would be:
- Significant and unaffordable increases in local rates and/or
- Significant and unaffordable increases in rates for broadband services, and/or
- Default on loan payments, and
- The inability to continue to maintain and deploy telecommunications networks to all customers in the rural ILECs' service areas, and/or

• The inability to continue operations.

- 13 C. The ability to charge average wholesale rates for switched and special access
- 14 through participation in National Exchange Carrier Association (NECA) pools.
- Recovery of a significant portion of costs associated with providing broadband services
- is made possible by the NECA pools. The NECA pools allow rural RoR ILECs serving
- 17 high cost areas to recover their actual cost of providing wholesale (intercarrier

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⁶ Currently the High Cost Loop Fund portion of the Federal USF is capped for rural RoR ILECs. As the rural RoR ILECs throughout the country continue to upgrade their networks, the total of their network costs recoverable form the High Cost Loop Fund exceeds the capped dollars that are available. As a consequence, Rural RoR ILECs do not have the ability or opportunity to earn the Commission authorized return on their invested costs. In many cases, this makes it difficult to repay the loans made for network investments and delays further network upgrades.

⁷ For instance using a "forward-looking" model costing to determine universal service funding for rural ILECs is inappropriate when actual embedded book costs are readily available and reflect the costs of the efficient fiber network being deployed by the rural RoR ILEC. None of these theoretical costing methods have proven in the past to be accurate for the diversity of rural RoR ILEC service areas. Further, unlike that actual costs to provide service on the books of rural RoR ILECs that is subject to audit and verification, the model based "forward looking costs" are not only inaccurate, but are subject to manipulation to achieve a desired result.

compensation) services while charging rates developed based on the average cost of the rural RoR ILECs participating in the pools. This process allows the rural RoR ILECs to (a) recover their access costs from the pools, (b) share the administrative costs of rate development and (c) charge similar interstate intercarrier compensation rates throughout the United States.

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The above process has allowed the rural RoR ILECs to fulfill the objectives of the Act (Section 254) by continuing to maintain and deploy state of the art efficient networks that provide quality basic and broadband services at affordable rate levels. This continuing success should not be jeopardized by USF and intercarrier compensation reform proposed in the NPRM and NBP that would deny the rural ILECs the ability to recover the cost of maintaining service and deploying necessary network investments. This course of action would inevitably lead to (a) deterioration of service quality, (b) the inability to fund further network upgrades so that all rural RoR ILEC customers have access to high speed broadband access, (c) unaffordable increases in rural customer rate levels, and defaults on repayment of loans made by RUS and other lending institutions. The USF and intercarrier compensation mechanisms do require reform if broadband access is to be made universally available in the United States. However, the problems with the operation of these mechanisms were not caused by the rural RoR ILECs' receipt of its cost based USF. Instead, reform should focus on problem areas, not wholesale reform that would harm the areas where the USF has successfully met the Act's objectives – rural RoR ILEC service areas.

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	IV. THE NBP AND NPRM PROPOSALS TO SHIFT RURAL ILECS FROM
	ROR TO INCENTIVE REGULATION AND TO FREEZE ICLS FUNDING,
<u></u>	ALONG WITH OTHER PROPOSALS IN THE NBP, WILL IRREPARABLY
	HARM RURAL ILECS AND THEIR COMMUNITIES AND IMPEDE, NOT
	ADVANCE THE GOAL OF UNIVERSAL BROADBAND AVAILABILITY
<u>A.</u>	SUMMARY OF CHANGES PROPOSED IN THE NPRM AND NBP THAT,
<u>W</u>]	LL SUBSTANTIVELY REDUCE RURAL ROR ILEC REVENUES AND DO
<u>NC</u>	OT PROVIDE SUFFICIENT SUPPORT FUNDING
Th	e NBP and the NPRM propose the following changes affecting the revenue that rural
Ro	R ILECs have available to recover the costs of maintaining and deploying networks
cap	able of providing basic and broadband services at affordable rates to all of the
cus	tomers in their service areas:
1.	Initially, shift rural ILECs from RoR to incentive regulation and freeze ICLS
	funding. ⁸ This change eliminates the ability of rural ILECs to recover its COLR
	actual invested costs and future cost increases from plant investments necessary to
	continue network upgrades that enable broadband access for all customers in its
	service area.
2.	In a future proceeding, complete elimination of existing Federal universal service
	funds relied on by rural RoR ILECs and redistribution of these funds to provide
	broadband access in non-rural ILEC service areas through the new Connect
	America Fund (CAF). The NBP proposes to maintain the 2010 level of overall USF
and '	tice of Inquiry and Notice of Proposed Rulemaking in WC Docket No. 10-90, GN Docket No. 09-51 WC Docket No. 05-337, Released April 21, 2010, paragraphs 55 and 56. Also see National Broadband (NBP), Chapter 8, Recommendation 8.6, page 147.

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funding (approximately \$4.6 billion) with little or no growth and to provide funding within that level of dollars to build broadband capable networks in non-rural ILEC areas (at least 65% of rural areas in the United States). The only rational conclusion that can be reached from the discussion and recommendations made in the NBP⁹ is that a major portion of the current universal service funding now relied on by rural RoR ILECs to meet the Act's Section 254 goals (approximately \$2.0 billion of the \$4.6 billion) will be redistributed to provide funding for broadband access in non-rural or price cap ILEC service areas.

3. In a future proceeding, elimination of interstate and intrastate switched access (intercarrier compensation or ICC) revenues with no apparent replacement of these revenues other than local consumer rate increases. ¹⁰ In fact, replacement of funding would be impossible because little or no additional USF funding above the year 2010 USF funding is allowed. As a consequence, revenues lost from intercarrier rate reductions cannot be replaced through USF funding. Minor increases may

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⁹ Statements made in the NBP that support this conclusion are:

^{• &}quot;By 2020, the 'old' High-Cost program will cease operations, and service providers will only receive support...through the CAF." NBP, page 150.

^{• &}quot;The FCC should manage the total size of the USF to remain close to its current size (in 2010 dollars)..." NBP, page 149

^{• &}quot;USF resources are finite, and policymakers need to weigh tradeoffs in allocating those resources so that the nation 'gets the most bang for its buck.' The objective should be to maximize the number of households that are served..." NBP, page 143.

^{• &}quot;Once the FCC completes rulemakings to establish the parameters of the new CAF, it should begin to distribute CAF funding to discrete geographic areas that contain unserved households. The FCC potentially could focus first on those states that have a higher absolute number or percentage of unserved housing units per capita, or those states that provide matching funds for broadband construction." NBP, page 149.

^{• 65%} of unserved households are in RBOC and Mid-Size company areas. NBP, page 141.

¹⁰ As stated by the NBP:

[•] For ICC, "...the framework should set forth a glide path to phase out per-minute charges by 2020." Page 148.

^{• &}quot;The [ICC] rate reduction in a staged approach will give carriers adequate time to prepare and make adjustments to offset the lost revenues." Page 149.

affordable, the revenues per line lost for interstate and intrastate switched access for
the rural RoR ILECs analyzed cannot be replaced.
In a number of places the NBP indicates that the plan will take "care to insure that
consumers continue to enjoy broadband and voice services that are available today."11
However, irrespective of these statements, the effect of the NBP's proposals in
combination with the capping of the overall fund level at approximately the 2010 level, ¹²
will be to significantly reduce rural RoR funding revenues and to provide insufficient
universal service mechanisms. As a consequence, these NPRM and NBP proposals are
at odds with Section 254(b)(5) of the Communications Act

come from increases to local exchange rates, but if these rates are to remain

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B. ANALYSIS OF THE EFFECT ON INDIVIDUAL RURAL ROR ILECS OF

THE USF AND ICC CHANGES PROPOSED IN THE NPRM AND NBP

As requested by the Commission in the NPRM,¹³ FWA has provided the attached data and analysis to show the effect not only of the NPRM proposals, but also the effect of the NBP proposals to redistribute existing rural RoR ILEC support to non-rural ILEC areas and to effectively eliminate interstate and intrastate switched access revenues.

18 These proposals cannot be considered in isolation from each other because they all

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¹¹ NBP, page 141. The NBP also states in recommendation 8.7 on page 148 regarding ICC reform, that "The FCC also should provide carriers the opportunity for adequate cost recovery." Further the NPB, on page 151 states that "The FCC's ability to shift funds from existing programs to broadband assumes that shifting the identified money from voice service to broadband will not negatively impact company operations or future deployment strategies."

¹² Notice of Inquiry and Notice of Proposed Rulemaking in WC Docket No. 10-90, GN Docket No. 09-51 and WC Docket No. 05-337, Released April 21, 2010, paragraph 51.

¹³ Id., paragraph 53:

[&]quot;To the extent that any commenter believes that these proposals, or the proposal to cap legacy high-cost support, would negatively affect affordable voice service for customers today, we would encourage such a commenter to identify all assumptions and to provide data, including information on network investment plans over the next five years and free cash flows, to support that position."

- 1 impact the ability of rural RoR ILECs to fulfill the Act's Section 254 universal service
- 2 objectives. The proposals in the NPRM and NBP can be analyzed and predicted, even
- with the rather brief information contained in those documents.
- 4 In summary, were the Commission to adopt the proposals contained in the NBP for USF
- 5 and ICC reform, as they affect the rural RoR ILECs, the analysis attached, summarized
- 6 below, shows a deterioration of revenues over time that ultimately results in a loss of
- 7 40% to 65% of the rural RoR ILEC's revenues. Loss of these revenues will make it
- 8 impossible for these rural ILECs to:

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- Pay for expenses and salaries, as well as principal and interest payments on loans
 made for network investments.
 - Continue the investments necessary to upgrade their network so that all their consumers have access high quality basic and broadband service access at affordable rate levels.
 - Continue to maintain the network so that quality service is provided and a COLR is available.
 - Quite likely, loss of these revenues will ultimately result in many rural RoR ILECs going at a minimum through bankruptcy and possibly out of business. Whichever is the case, the effect on the rural communities they serve will be devastating:
 - There will be significant harm to rural economic development businesses and
 residential customers would no longer have access to high quality voice and
 broadband service at affordable rate levels that are comparable to those offered
 in urban areas.

- Hospitals, clinics and schools would be disadvantaged inability to obtain
 reliable high speed broadband service.
- Jobs at rural RoR carriers will be lost. Indirectly, jobs for suppliers and
 businesses that provide services to the rural RoR ILEC will be lost. This will
 have a secondary impact on businesses operating in rural communities. The
 salaries from individuals that lose jobs will no longer be available to purchase
 goods and services in rural community businesses.
 - Loss of rural community tax base and revenues paid to other rural utilities (gas, electric and water), further harming the ability of the rural community to remain viable.
- Beyond harming the rural community and consumers, the proposals if adopted, will result
- Loan defaults, and
- Loss of equity by rural RoR ILEC owners.

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C. ANALYSIS ASSUMPTIONS

- 17 In preparing these analyses, FWA assumed:
 - Minimal new investment after 2010 the ability to pay back loans for new investment is unlikely, as a result of the initial freeze of ICLS proposed in the NPRM and the additional NPB proposals.
 - An ICLS freeze as proposed in the NPRM, as well as redistribution of the majority of the existing Federal USF funding to non-rural ILEC areas, and loss

1	of interstate and intrastate switched access with minimal replacement revenues
2	as proposed in the NBP.

- Minimal CAF revenues (estimated 10% of current USF funding) to fund remaining new broadband network construction in rural RoR ILEC unserved areas. As noted in the NBP plan, CAF funding will primarily go to unserved areas with the highest density of unserved areas. These are the non-rural ILEC areas, not the areas served by the rural RoR ILECs.
- Special access, intrastate USFs and local revenues do not change substantially. However, if RoR regulation is eliminated federally, there likely will be significant pressure to eliminate RoR regulation in the intrastate jurisdictions. As a consequence, intrastate USF funding could be substantively reduced, because these are RoR cost based funds. Additionally, interstate special access revenues may be at risk in the special access review planned in the NBP.¹⁴

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D. DESCRIPTION OF ANALYSIS ATTACHED TO THESE COMMENTS FOR

16 INDIVIDUAL RURAL ROR ILECS

17 FWA has assembled data for several of its client companies.

18 **Overview of Results:**

- 19 At a high level, the analysis demonstrates a number of points:
- 20 1. For each of the rural RoR ILECs, the adverse financial impacts of the NPRM and
- NBP proposals are clear. Significant amounts of revenue (40% up to 65%) are lost.
- The remaining revenues are insufficient to recover deployed network costs, pay
- principal and interest on loans, pay salaries and maintain a quality network.

¹⁴ NBP, page 143.

- 1 2. The differing and diverse service area characteristics of rural RoR ILECs are reflected
- 2 in the revenue levels. The differing regulated revenue levels per line necessary to
- 3 operate each rural RoR ILEC are primarily a reflection of differing customer densities
- and the timing of the network deployment cycle (See Chart 1).
- 5 3. Differences in the investment cycle Planned investments through 2010 were
- 6 included in the analysis. ILECs with network upgrades deployed through 2010 will
- have increasing expense (primarily depreciation expense) and revenue levels (Federal
- 8 HCL funding lags the investment by two years) in the first few years of the ten year
- 9 NBP. Subsequently, in the mid to later years of the 10 year NBP, the revenue
- reductions as a result of the NPRM and NBP proposed changes are apparent (see
- 11 Chart 3, ILECs A and B). On the other hand, for ILECs that had no significant
- network upgrades in 2009 or 2010, the effects of the NBP are apparent earlier as
- revenues begin to decline sooner (see Chart 3, ILECs C and D).
- 14 4. Regulated revenues are not producing earnings above the authorized interstate and
- intrastate authorized returns, and in some cases earnings are significantly below the
- authorized returns. Chart 3 compares total regulated revenues with only expenses and
- taxes of the rural RoR ILECs. The revenue requirement for return on investment and
- the cost of debt were not included. Had they been included, revenues would have
- been roughly equal to or below the combined return requirement plus expenses and
- 20 taxes.

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1 General Description of Each Chart Developed as a Result of the Analysis

- 2 Charts 1 through 6 (attached) for the rural RoR ILECs analyzed provide the following
- 3 information:¹⁵
- 4 <u>Chart 1</u> The current per-line and percentage of regulated revenues (interstate and
- 5 intrastate) for 2009 that recover the rural RoR ILEC's costs to maintain and upgrade its
- 6 COLR network. Items to note are:
- a) Local revenues per line are, as envisioned by the Act, maintained at affordable
- 8 levels, and are not, unreasonably low.
- 9 b) In order to maintain affordable rates and quality service, significant Federal USF
- and switched ICC revenues are necessary to pay for the costs to provide the COLR
- 11 network in these high cost to serve, low density service areas.
- 12 <u>Chart 2</u> Restates the current per-line and percentage of regulated revenues (interstate
- and intrastate) for 2009 based on NPRM and NPB proposals. Items to note are:
- a) The majority of Federal USF revenues are eliminated because they will be
- redistributed to other non-rural ILEC areas to deploy broadband in those areas.
- b) Interstate and intrastate switched access revenues are eliminated.
- 17 c) The overall revenue reductions for the rural RoR ILECs analyzed range from 40% to
- 18 65%.
- 19 <u>Chart 3</u> Charts 1 and 2 for each of the rural RoR ILECs simply restate 2009 revenues
- 20 to provide an estimate of the effects of the NPRM and NBP proposals. Chart 3 as well as
- 21 Charts 4 to 6 project revenues and expenses and/or costs over the 10 year NBP horizon to
- determine a more precise estimate of the NBP's effects year by year.

¹⁵ Data supporting these Charts can be made available to the FCC.

- 1 Chart 3 compares estimated expenses, including payment of interest on debt with
- 2 expected revenues year by year over the 10 year period of the NBP. This analysis **does**
- 3 <u>not</u> include any recover of return on investment, nor principal payment on debt. The
- 4 analysis shows that:
- 5 a) Generally, over the period from 2013 to the end of 2020, revenues decline as a result
- of the ICLS freeze and the phase out of interstate and switched access revenues.
- 7 b) In 2021, revenues drop due to the elimination of current USF funding, net of
- 8 increased CAF funding.
- 9 Like the simpler 2009 restatement analysis (Charts 1 and 2), this detailed analysis shows
- 10 a similar reduction of revenues. Expenses shown are composed of primarily salaries,
- depreciation and interest expense. Reduction in expenses over time, as a consequence,
- means job losses, reduction in quality of service, and ultimately toward the end of the
- period, the inability to pay interest on debt and employ sufficient personnel to operate.
- 14 Chart 4 Chart 4 is an estimate of net income over the period of the NBP. It provides a
- 15 picture of expected rural RoR ILEC financials as a result of the NPRM and NBP
- proposals. Similar to the results in Chart 3, Chart 4 shows that the rural RoR ILECs will
- have insufficient revenues to cover expenses and interest payments on debt.
- 18 Chart 5 This analysis shows the estimated Times Interest Earned (TIER) ratio that
- 19 lenders (in particular the Rural Utilities Service RUS) use to determine a rural RoR
- 20 ILEC's ability to pay the interest on debt. If this ratio falls below 1.0, lenders become
- 21 concerned about the ability to pay outstanding loans. As can be seen from Chart 5 for
- 22 each of the rural RoR ILECs analyzed, the lenders should have concerns with the ability

- to pay the interest on outstanding loans, let alone principal, as a result of the NPRM and
- 2 NPB proposals.
- 3 <u>Chart 6</u> Chart 6 is the cash flow analysis requested by the Commission. This analysis,
- 4 like the others shows that the NPRM and the NBP proposals put in jeopardy the rural
- 5 RoR ILEC's ability to continue to provide service.

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V. PROPOSALS CONTAINED IN THE NPRM AND NBP TO REVISE RURAL

ROR ILEC FUNDING APPEAR TO BE BASED ON MYTHS AND

MISCONCEPTIONS, NOT REALITY

- 10 Myth 1 Non-Rural carriers have insufficient revenues to deploy broadband networks in
- their rural exchanges. 16 As a consequence, funding from other sources, including funding
- that supports the recovery of rural RoR ILEC networks needs to be redirected to these
- 13 areas.
- 14 **Reality** Non-rural ILECs chose to move from RoR regulation to incentive or price cap
- 15 regulation. They did so because these carriers wanted pricing freedoms that would allow
- them the opportunity to increase revenue and reduce costs so they could earn in excess of
- 17 the amounts that they would be allowed to earn under RoR regulation. These additional
- earnings have been used, and continue to be used by non-rural ILECs to build broadband
- and video capable networks in areas where sufficient earnings could be achieved (urban
- 20 areas), fund other business ventures and to reward stockholders. Sufficient revenues

¹⁶ Notice of Inquiry and Notice of Proposed Rulemaking in WC Docket No. 10-90, GN Docket No. 09-51 and WC Docket No. 05-337, Released April 21, 2010, paragraph 3, footnote deleted, states that "...the types of support that a carrier receives depends on the size and regulatory classification of the carrier, not the characteristics of the area to which support is directed." Footnote 7 also states that "Small carriers typically receive considerably more per-line support than larger carriers serving high-cost areas."

These comments appear to indicate that larger price cap ILECs have not had and still do not have sufficient revenues to provide broadband capable networks in their rural exchanges because of their regulatory classification as price cap carriers.

would have been, and likely still are available (in place of USF revenues) for these ILECs

2 to build high speed broadband networks in their rural exchanges, but they have not done

3 so because they can earn higher returns on their invested capital by directing the

4 investment to their more urban exchanges and other business ventures.. If only a small

5 portion of the portion of the price cap incentive earnings of these carriers were directed to

broadband deployment in their rural exchanges, the goals of the NBP could be met over

time and it would be unnecessary to redirect support essential to the provision of rural

RoR ILEC service to build broadband networks in the non-rural ILEC areas.

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10 Myth 2 - Rate of return is inefficient and incentive regulation is efficient - "Rate-of-

return regulation was not designed to promote efficiency or innovation.... permitting

carriers to be made whole through USF support lessens their incentives to become more

efficient and offer innovative services to retain and attract customers."¹⁷

14 **Reality** – If the primary goal of the NBP is to be met – access to high speed broadband

by all Americans - these assumptions are incorrect. Incentive regulation incents revenue

maximization through:

• Deployment of capital investments for broadband and innovations only where

sufficient revenues and earnings can be achieved. As a result, incentive

regulation doesn't incent capital deployment for broadband and innovations for

customers in price cap carriers' rural exchanges.

• Reduction in expenses – job losses, reduction in maintenance and customer

service expenses in particular in the rural areas of price cap carriers.

¹⁷ NBP, page 147.

1 On the other hand, RoR regulation, in combination with State and Federal Commission as

2 well as lender rules and oversight incents and requires efficient provision of high quality

3 and innovative basic and broadband services to all customers in their service areas.

4 Myth 3 – CAF funding, based on forward looking costs "...efficiently ensures universal

5 access to broadband and voice services..." while use of embedded costs to calculate

support "...would lead to subsidization of inefficient carriers at the expense of efficient

7 carriers and could create disincentives for carriers to operate efficiently."¹⁹

8 Reality – At odds with these assertions, forward looking costs are inappropriate when

actual embedded book costs are readily available and reflect the costs of the efficient

fiber network being deployed by the rural RoR ILEC. None of these theoretical forward

looking costing methods have proven in the past to be accurate. The "cookie cutter"

approach employed by forward looking costing models fails to account for the diversity

of rural RoR ILEC service areas. Further, unlike that actual costs to provide service on

the books of rural RoR ILECs that is subject to audit and verification, the model based

"forward looking costs" are not only inaccurate, but are subject to manipulation to

achieve a desired result.

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18 Myth 4 – "Oversight of the specific uses of High-Cost support is limited."²⁰

19 **Reality** – This assertion may be correct for Competitive Eligible Telecommunications

Carriers and Non-Rural ILECs, but it is incorrect for rural RoR ILECs. Unlike other

21 recipients of USF funding, rural RoR ILECs are subject to State and Federal audits and

¹⁸ Notice of Inquiry and Notice of Proposed Rulemaking in WC Docket No. 10-90, GN Docket No. 09-51 and WC Docket No. 05-337, Released April 21, 2010, paragraph 2.

¹⁹ Id., paragraph 4, footnote deleted.

²⁰ NBP, page 141

- 1 NECA reviews of their costs and revenues. Additionally, the recent USAC audits should
- 2 have put to rest the notion that there is widespread "waste, fraud and abuse" in the use of
- 3 Federal USF. There were minimal and largely insignificant findings.

- 5 Often in the area of telecommunications, economic theories are disproven by facts. The
- 6 notion that RoR regulation based on actual embedded costs is outmoded and promotes
- 7 inefficiency while incentive regulation based on forward looking costs promotes efficient
- 8 outcomes is disproven by observable and demonstrable results. In fact, RoR regulation,
- 9 with Commission oversight, has, unlike incentive regulation, continued to bring the
- 10 benefits of efficient and innovative services, including broadband, to all consumers
- served by RoR ILECs, not just to an urban subset of consumers.

12

- 13 Respectfully submitted,
- 14 FRED WILLIAMSON & ASSOCIATES, INC.
- 15 By, Paul Cooper
- President, Fred Williamson & Associates, Inc.
- 17 5810 E. Skelly Drive, Suite 900, Tulsa, OK 74135
- 18 Phone: 918-298-1618
- Email: pcooper02@earthlink.net

Revenue Cost Recovery Per Access Line for a Rural Rate of Return ILEC

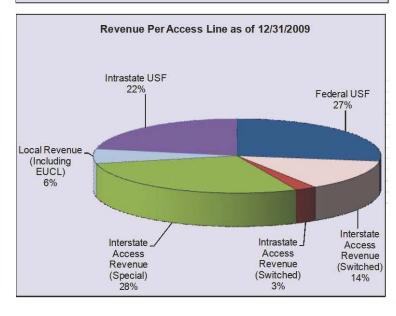
Revenue Per Access Line as of 12/31/2009

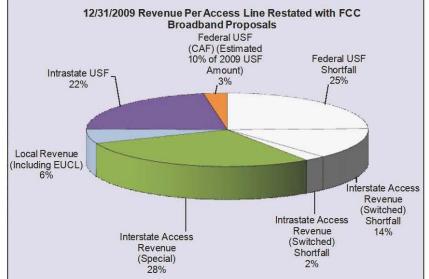
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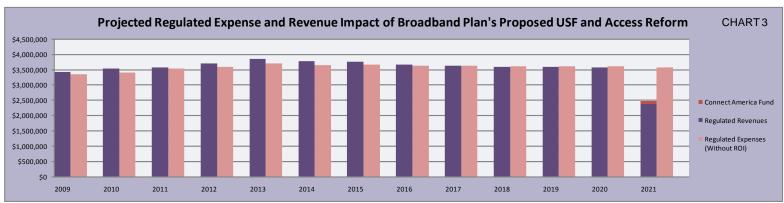
Description	Monthly Revenue Per Access Line	%
Federal USF	\$107	27.3%
Interstate Access Revenue (Switched)	\$53	13.6%
Intrastate Access Revenue (Switched)	\$9	2.4%
Interstate Access Revenue (Special)	\$111	28.4%
Local Revenue (Including EUCL)	\$25	6.3%
Intrastate USF	\$86	22.1%
Total	\$391	100.0%

12/31/2009 Revenue Per Access Line Restated with FCC Broadband I	roposals	CHART 2
	Monthly	

Description	Revenue Per Access Line	%
Federal USF Shortfall	(\$96)	24.6%
Interstate Access Revenue (Switched) Shortfall	(\$53)	13.6%
Intrastate Access Revenue (Switched) Shortfall	(\$9)	2.4%
Interstate Access Revenue (Special)	\$111	28.4%
Local Revenue (Including EUCL)	\$25	6.3%
Intrastate USF	\$86	22.1%
Federal USF (CAF) (Estimated 10% of 2009 USF Amount)	\$11	2.7%
Total 2021 Revenues:	\$232	59.5%
Total Shortfall:	(\$158)	40.5%

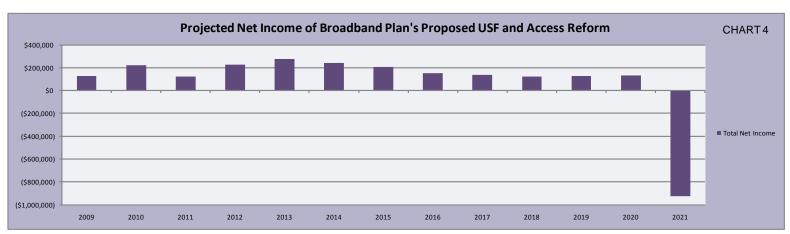






Compared to 2009, the 2021 revenues have reduced by approximately \$0.9 million.

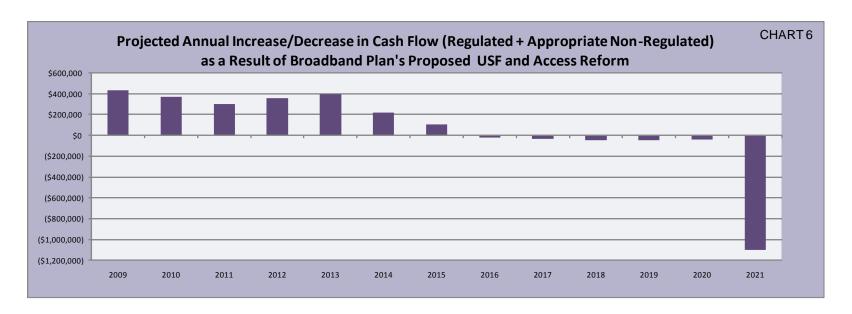
Expenses consists of all regulated expenses including interest expense and income taxes; This amount does not include return on investment or principal payments on long term debt.



Projected net income is total revenues less expenses. These amounts include both regulated and nonregulated revenue/expenses related to the ILEC's network.

													CHART 5
	YEAR:												
Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Projected TIER (Times Interest Earned Ratio)	1.64	2.11	1.61	2.07	2.28	2.09	1.90	1.64	1.59	1.53	1.55	1.57	-2.94

Times Interest Earned Ratio (TIER) means the ratio of a borrower's net income (after taxes) plus interest expense, all divided by Interest expense. For RUS Loans, a company must maintain at a minimum TIER of 1.0.



Revenue Cost Recovery Per Access Line for a Rural Rate of Return ILEC

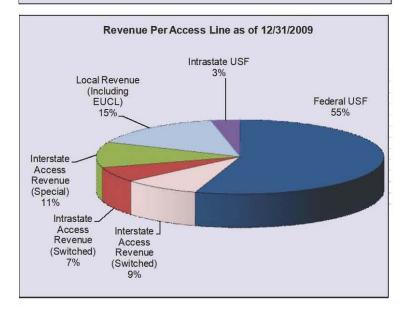
Revenue	Per Access	Line a	is of 12/31	/2009

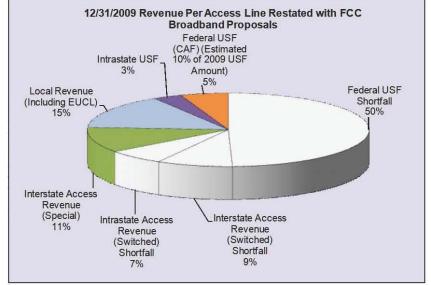
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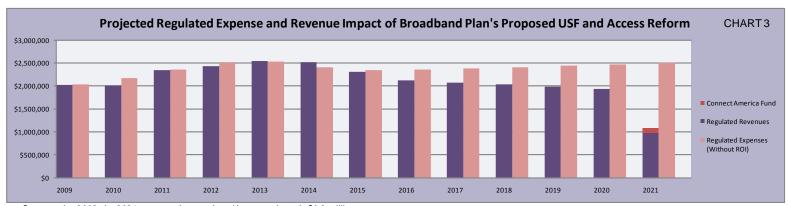
Description	Monthly Revenue Per Access Line	%
Federal USF	\$74	55.0%
Interstate Access Revenue (Switched)	\$12	8.7%
Intrastate Access Revenue (Switched)	\$9	6.6%
Interstate Access Revenue (Special)	\$15	11.2%
Local Revenue (Including EUCL)	\$21	15.2%
Intrastate USF	\$4	3.3%
Total	\$135	100.0%



Description	Revenue Per Access Line	%
Federal USF Shortfall	(\$67)	49.5%
Interstate Access Revenue (Switched) Shortfall	(\$12)	8.7%
Intrastate Access Revenue (Switched) Shortfall	(\$9)	6.6%
Interstate Access Revenue (Special)	\$15	11.2%
Local Revenue (Including EUCL)	\$21	15.2%
Intrastate USF	\$4	3.3%
Federal USF (CAF) (Estimated 10% of 2009 USF Amount)	\$7	5.5%
Total 2021 Revenues:	\$47	35.2%
Total Shortfall:	(\$87)	64.8%

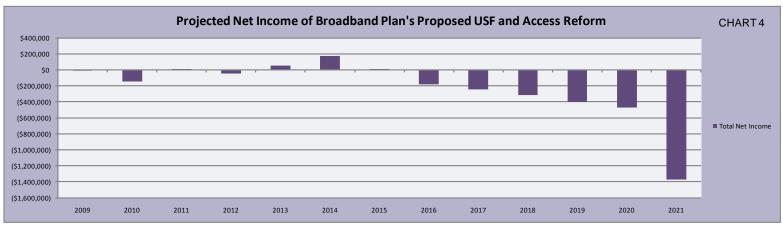






Compared to 2009, the 2021 revenues have reduced by approximately \$0.9 million.

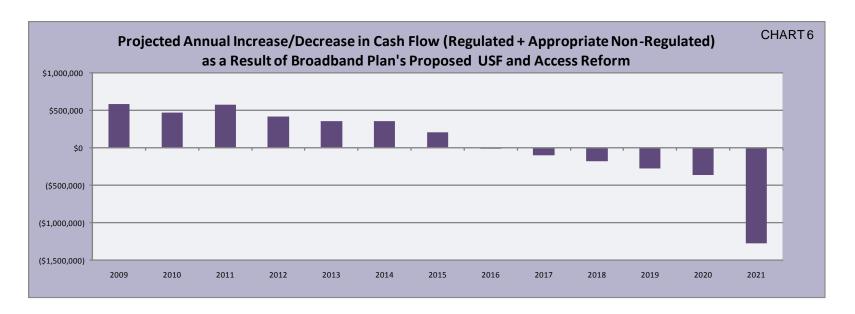
Expenses consists of all regulated expenses including interest expense and income taxes; This amount does not include return on investment or principal payments on long term debt.



Projected net income is total revenues less expenses. These amounts include both regulated and nonregulated revenue/expenses related to the ILEC's network.

													CHART 5
	YEAR:												
Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Projected TIER (Times Interest Earned Ratio)	0.66	-1.40	1.07	0.81	1.18	1.59	1.05	0.28	-0.02	-0.39	-0.84	-1.29	-6.00

Times Interest Earned Ratio (TIER) means the ratio of a borrower's net income (after taxes) plus interest expense, all divided by Interest expense. For RUS Loans, a company must maintain at a minimum TIER of 1.0.

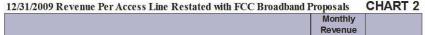


Revenue Cost Recovery Per Access Line for a Rural Rate of Return ILEC

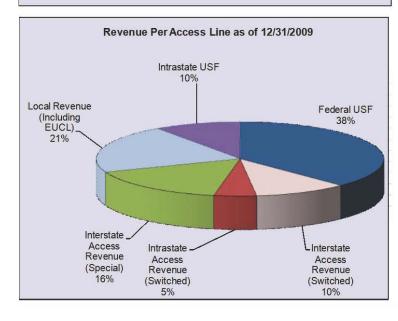
Revenue Per Access Line as of 12/31/2009

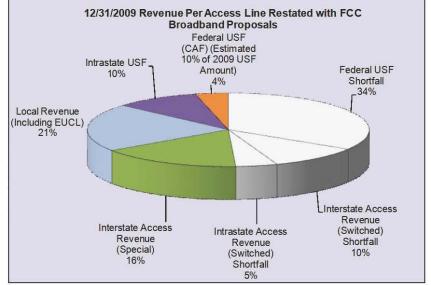
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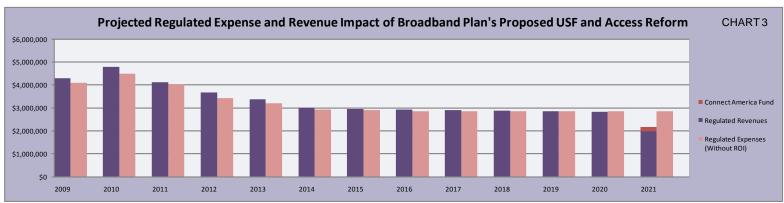
Description	Monthly Revenue Per Access Line	%
Federal USF	\$54	37.7%
Interstate Access Revenue (Switched)	\$15	10.5%
Intrastate Access Revenue (Switched)	\$7	4.8%
Interstate Access Revenue (Special)	\$23	16.2%
Local Revenue (Including EUCL)	\$30	21.1%
Intrastate USF	\$14	9.7%
Total	\$144	100.0%



	Revenue Per Access	
Description	Line	%
Federal USF Shortfall	(\$49)	33.9%
Interstate Access Revenue (Switched) Shortfall	(\$15)	10.5%
Intrastate Access Revenue (Switched) Shortfall	(\$7)	4.8%
Interstate Access Revenue (Special)	\$23	16.2%
Local Revenue (Including EUCL)	\$30	21.1%
Intrastate USF	\$14	9.7%
Federal USF (CAF) (Estimated 10% of 2009 USF Amount)	\$5	3.8%
Total 2021 Revenues:	\$73	50.8%
Total Shortfall:	(\$71)	49.2%

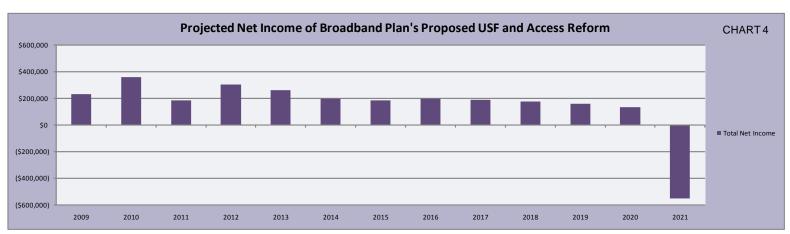






Compared to 2009, the 2021 revenues have reduced by approximately \$2.1 million.

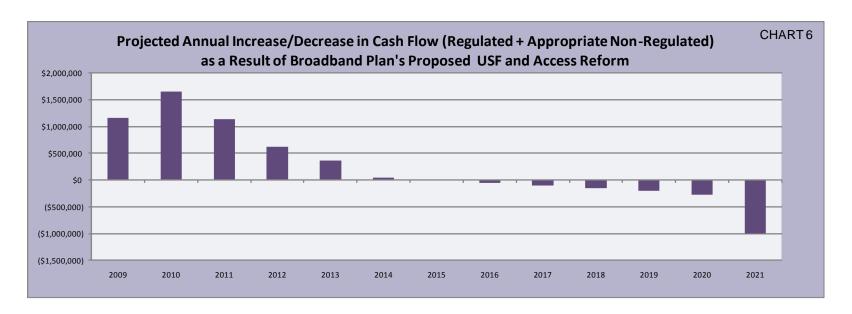
Expenses consists of all regulated expenses including interest expense and income taxes; This amount does not include return on investment or principal payments on long term debt.



Projected net income is total revenues less expenses. These amounts include both regulated and nonregulated revenue/expenses related to the ILEC's network.

													CHART 5
	YEAR:												
Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Projected TIER (Times Interest Earned Ratio)	4.49	7.13	4.53	7.67	7.43	6.41	6.80	7.98	8.50	8.83	8.98	8.60	-34.91

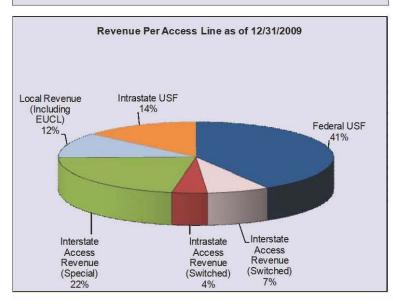
Times Interest Earned Ratio (TIER) means the ratio of a borrower's net income (after taxes) plus interest expense, all divided by Interest expense. For RUS Loans, a company must maintain at a minimum TIER of 1.0.

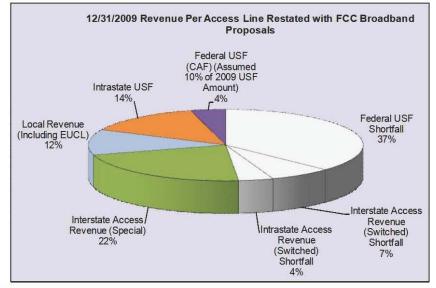


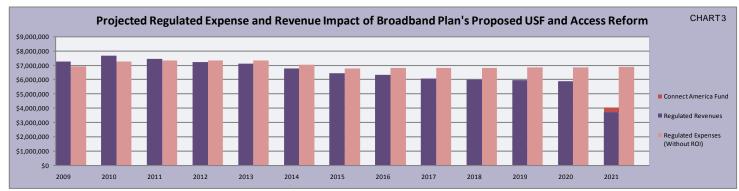
Revenue Cost Recovery Per Access Line for a Rural Rate of Return ILEC

enue Per Access Line as of 12/31/2009		CHART		
Description	Monthly Revenue Per Access Line	%		
Federal USF	\$87	41.3%		
Interstate Access Revenue (Switched)	\$15	7.3%		
Intrastate Access Revenue (Switched)	\$9	4.2%		
Interstate Access Revenue (Special)	\$46	22.0%		
Local Revenue (Including EUCL)	\$24	12.0%		
Intra state USF	\$29	13.7%		
Total	\$211	100.0%		

1/2009 Revenue Per Access Line Restated with FCC Broad	band Proposals	CHART	
Description	Monthly Revenue Per Access Line	%	
Federal USF Shortfall	(\$78)	37.1%	
Interstate Access Revenue (Switched) Shortfall	(\$15)	7.3%	
Intrastate Access Revenue (Switched) Shortfall	(\$9)	4.1%	
Interstate Access Revenue (Special)	\$46	22.0%	
Local Revenue (Including EUCL)	\$24	11.5%	
Intrastate USF	\$29	13.9%	
Federal USF (CAF) (Assumed 10% of 2009 USF Amount)	\$9	4.1%	
Total 2021 Revenues:	\$109	51.5%	
Total Shortfall:	(\$102)	48.5%	

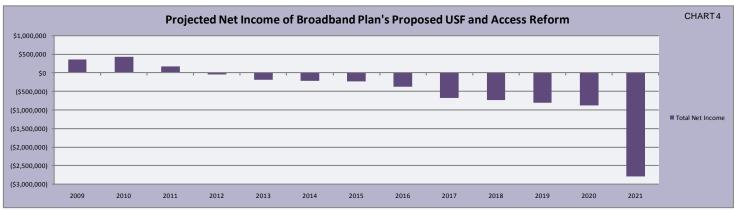






Compared to 2009, the 2021 revenues have reduced by approximately \$3.2 million annually.

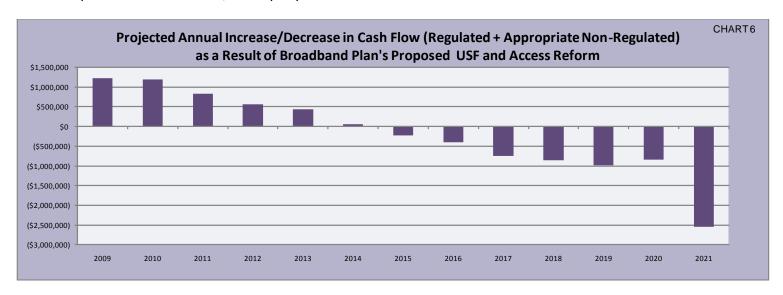
Expenses consists of all regulated expenses including interest expense and income taxes; This amount does not include return on investment or principal payments on long term debt.



Projected net income is total revenues less expenses. These amounts include both regulated and nonregulated revenue/expenses related to the ILEC's network.

													CHART 5
	YEAR:												
Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Projected TIER (Times Interest Earned Ratio)	1.91	1.94	1.33	0.90	0.57	0.47	0.33	-0.24	-1.61	-2.56	-4.16	-7.08	-38.91

Times Interest Earned Ratio (TIER) means the ratio of a borrower's net income (after taxes) plus interest expense, all divided by Interest expense. For RUS Loans, a company must maintain at a minimum TIER of 1.0.



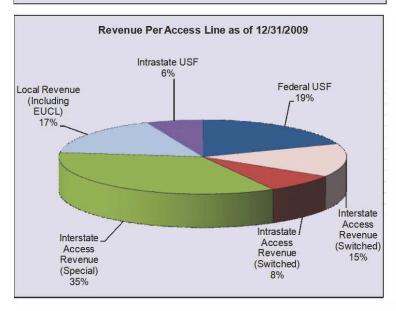
Revenue Cost Recovery Per Access Line for a Rural Rate of Return ILEC

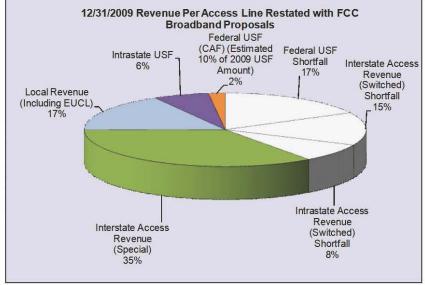
Revenue Per Access Line as of 12/31/2009

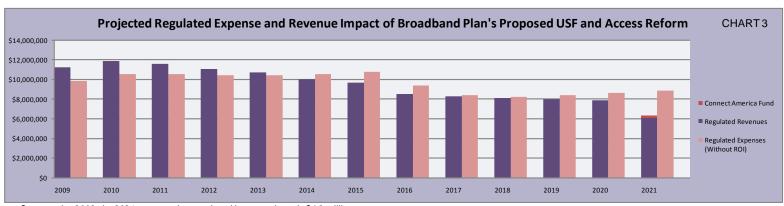
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Description	Monthly Revenue Per Access Line	%
Federal USF	\$35	19.3%
Interstate Access Revenue (Switched)	\$26	14.5%
Intrastate Access Revenue (Switched)	\$15	8.1%
Interstate Access Revenue (Special)	\$63	34.9%
Local Revenue (Including EUCL)	\$30	16.8%
Intrastate USF	\$12	6.4%
Total	\$181	100.0%

	Monthly Revenue Per Access	
Description	Line	%
Federal USF Shortfall	(\$31)	17.4%
Interstate Access Revenue (Switched) Shortfall	(\$26)	14.5%
Intrastate Access Revenue (Switched) Shortfall	(\$15)	8.1%
Interstate Access Revenue (Special)	\$63	34.9%
Local Revenue (Including EUCL)	\$30	16.8%
Intrastate USF	\$12	6.4%
Federal USF (CAF) (Estimated 10% of 2009 USF Amount)	\$3	1.9%
Total 2021 Revenues:	\$109	60.0%
Total Shortfall:	(\$72)	40.0%

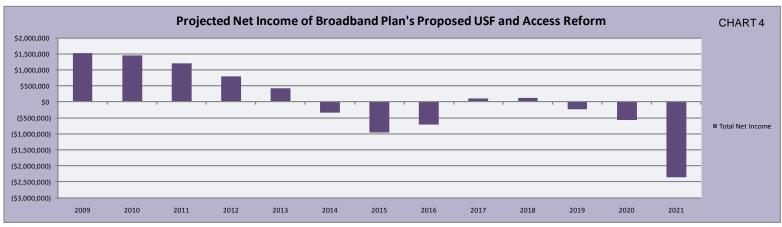






Compared to 2009, the 2021 revenues have reduced by approximately \$4.9 million.

Expenses consists of all regulated expenses including interest expense and income taxes; This amount does not include return on investment or principal payments on long term debt.



Projected net income is total revenues less expenses. These amounts include both regulated and nonregulated revenue/expenses related to the ILEC's network.

													CHART 5
	YEAR:	YEAR:	YEAR:	YEAR:	YEAR:	YEAR:	YEAR:						
Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Projected TIER (Times Interest Earned Ratio)	11.33	12.05	11.23	8.67	5.57	-3.05	-11.83	-9.59	2.85	3.21	-3.86	-12.62	-61.34

Times Interest Earned Ratio (TIER) means the ratio of a borrower's net income (after taxes) plus interest expense, all divided by Interest expense. For RUS Loans, a company must maintain at a minimum TIER of 1.0.

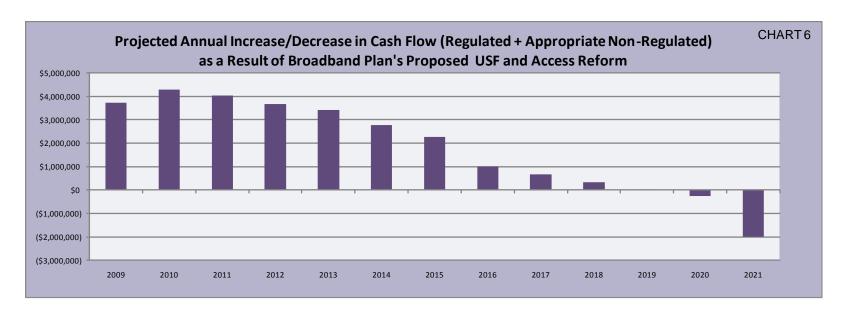


CHART 2

Revenue Cost Recovery Per Access Line for a Rural Rate of Return ILEC

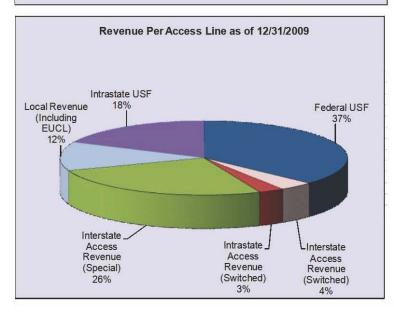
Revenue Per Access Line as of 12/31/2009

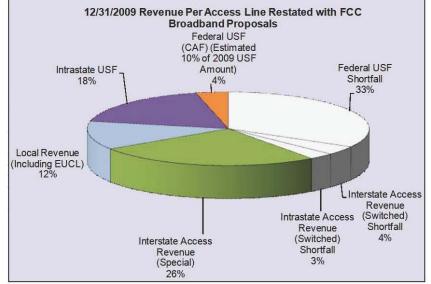
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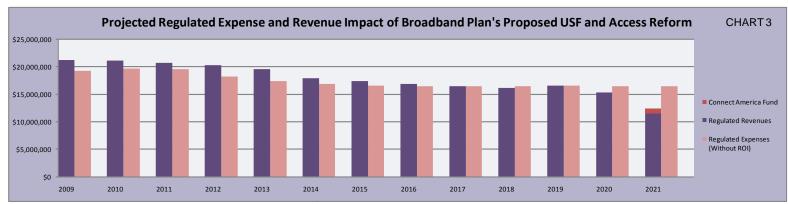
Description	Monthly Revenue Per Access Line	%
Federal USF	\$109	36.9%
Interstate Access Revenue (Switched)	\$11	3.9%
Intrastate Access Revenue (Switched)	\$8	2.9%
Interstate Access Revenue (Special)	\$76	25.7%
Local Revenue (Including EUCL)	\$37	12.5%
Intrastate USF	\$53	18.1%
Total	\$296	100.0%

12/31/2	2009 Revenue Per Access Line Restated with FCC Broadband Proposals	CHART 2
	Monthly Revenu	6
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	Revenue Per Access	
Description	Line	%
Federal USF Shortfall	(\$98)	33.2%
Interstate Access Revenue (Switched) Shortfall	(\$11)	3.9%
Intrastate Access Revenue (Switched) Shortfall	(\$8)	2.9%
Interstate Access Revenue (Special)	\$76	25.7%
Local Revenue (Including EUCL)	\$37	12.5%
Intrastate USF	\$53	18.1%
Federal USF (CAF) (Estimated 10% of 2009 USF Amount)	\$11	3.7%
Total 2021 Revenues:	\$178	60.0%
Total Shortfall:	(\$118)	40.0%

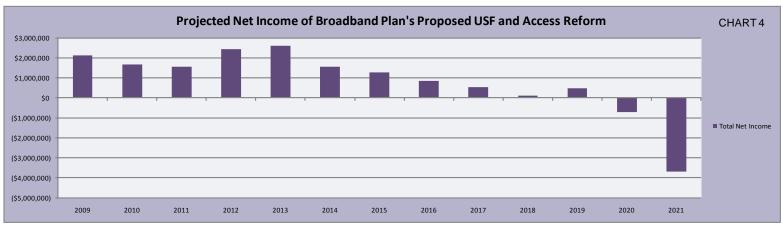






Compared to 2009, the 2021 revenues have reduced by approximately \$8.9 million.

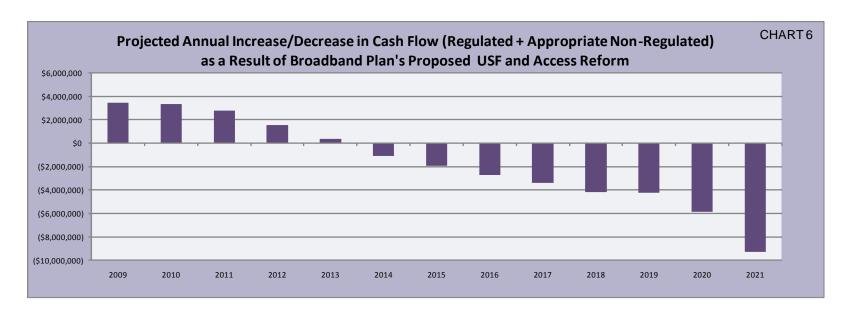
Expenses consists of all regulated expenses including interest expense and income taxes; This amount does not include return on investment or principal payments on long term debt.



Projected net income is total revenues less expenses. These amounts include both regulated and nonregulated revenue/expenses related to the ILEC's network.

													CHART 5
	YEAR:												
Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Projected TIER (Times Interest Earned Ratio)	1.58	1.46	1.43	1.68	1.73	1.44	1.36	1.24	1.15	1.03	1.14	0.79	-0.07

Times Interest Earned Ratio (TIER) means the ratio of a borrower's net income (after taxes) plus interest expense, all divided by Interest expense. For RUS Loans, a company must maintain at a minimum TIER of 1.0.



Revenue Cost Recovery Per Access Line for a Rural Rate of Return ILEC

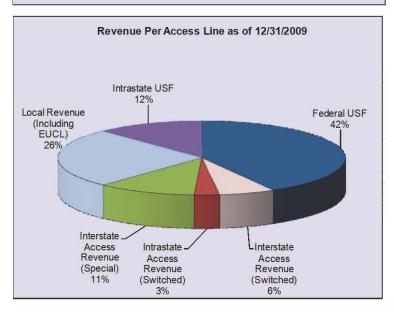
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Revenue	Per	Access	Lane	as o	1 12/	31	2009

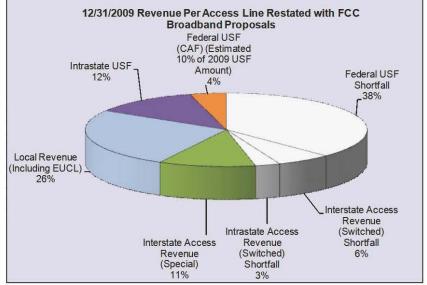
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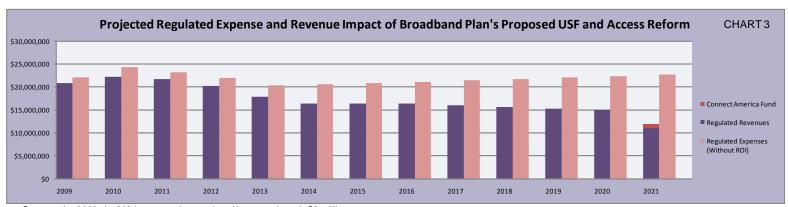
Description	Monthly Revenue Per Access Line	%
Federal USF	\$57	41.7%
Interstate Access Revenue (Switched)	\$9	6.3%
Intrastate Access Revenue (Switched)	\$4	2.8%
Interstate Access Revenue (Special)	\$15	11.1%
Local Revenue (Including EUCL)	\$36	25.9%
Intrastate USF	\$17	12.2%
Total	\$138	100.0%

12/31/2009 Revenue Per Access Line Restated with FCC Broadband Proposals	CHARTZ
Monthly	/

Description	Revenue Per Access Line	%	
Federal USF Shortfall	(\$52)	37.6%	
Interstate Access Revenue (Switched) Shortfall	(\$9)	6.3%	
Intrastate Access Revenue (Switched) Shortfall	(\$4)	2.8%	
Interstate Access Revenue (Special)	\$15	11.1%	
Local Revenue (Including EUCL)	\$36	25.9%	
Intrastate USF	\$17	12.2%	
Federal USF (CAF) (Estimated 10% of 2009 USF Amount)	\$6	4.2%	
Total 2021 Revenues:	\$73	53.3%	
Total Shortfall:	(\$64)	46.7%	

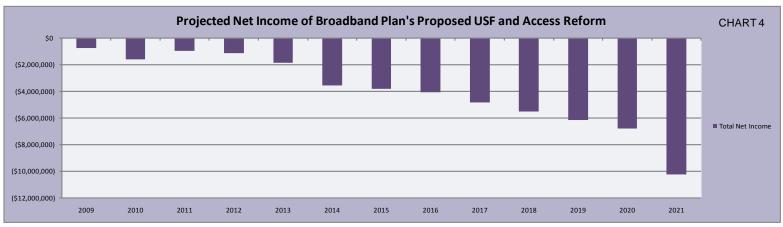






Compared to 2009, the 2021 revenues have reduced by approximately \$9 million.

Expenses consists of all regulated expenses including interest expense and income taxes; This amount does not include return on investment or principal payments on long term debt.



Projected net income is total revenues less expenses. These amounts include both regulated and nonregulated revenue/expenses related to the ILEC's network.

													CHART 5
	YEAR:	YEAR:	YEAR:	YEAR:	YEAR:	YEAR:	YEAR:						
Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Projected TIER (Times Interest Earned Ratio)	-0.04	-0.57	-0.16	-0.70	-2.52	-8.39	-15.58	-49.65	-59.49	-67.74	-75.79	-83.69	-126.72

Times Interest Earned Ratio (TIER) means the ratio of a borrower's net income (after taxes) plus interest expense, all divided by Interest expense. For RUS Loans, a company must maintain at a minimum TIER of 1.0.

